

IN THE CLAIMS:

Please amend the claims 1, 13, 25, 32, 44-45, 48-50, 53, 56, and 59.

Please add new claims 64 and 65 as follows.

1. (Currently Amended) Method of deciding on a communication connection changeover of a subscriber terminal, said method comprising

detecting communication information from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate;

transmitting said communication information from said at least one access node to a subscriber terminal by signalling by transmitting specific frames;

processing, in the subscriber terminal, the transmitted communication information and determining, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

using the processing result for a decision in the subscriber terminal on a communication connection changeover of the subscriber terminal.

2. (Previously Presented) The method according to claim 1, wherein transmitting comprises sending the communication information across a wireless communication network based on an IEEE 802.11 standard.

3. (Previously Presented) The method according to claim 2, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

4. (Previously Presented) The method according to claim 1, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

5. (Previously Presented) The method according to claim 1, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one access node.

6. (Previously Presented) The method according to claim 1, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the transmitting access node in the wireless communication network.

7. (Previously Presented) The method according to claim 1, wherein said communication information comprises a frequency channel indicator for indicating the

frequency channel used by at least part of the at least one access node at the respective frequency band.

8. (Previously Presented) The method according to claim 1, wherein said processing further comprises:

detecting a signal strength indicator on a predetermined frequency band; and
comparing the detected signal strength indicator with a predefined threshold value,
wherein the result of the comparison indicates an estimation of the connection capability of an access node on another frequency band.

9. (Previously Presented) The method according to claim 1, wherein the decision on a communication connection changeover is made by the subscriber terminal.

10. (Previously Presented) The method according to claim 1, wherein a result of the decision on a communication connection changeover of the subscriber terminal comprises a change of the communication connection from the present frequency band to another frequency band which is common to the subscriber terminal and the access node associated with the subscriber terminal.

11. (Previously Presented) The method according to claim 1, wherein a result of the decision on a communication connection changeover of the subscriber terminal

comprises a change of the communication connection from a current access node to a specific frequency band of a neighboring access node which is common to a subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

12. (Previously Presented) The method according to claim 1, wherein communication information is transmitted from two or more access nodes in a wireless communication network, and are processed in said processing step.

13. (Currently Amended) A system for deciding on performing a communication connection changeover of a subscriber terminal, comprising:

detecting means for detecting and transmitting communication information from said at least one access node to a subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate, wherein said means for detecting and transmitting the communication information of the at least one access node are configured to incorporate the communication information in a signaling using a transmission of specific frames to said subscriber terminal;

processing means for processing the transmitted communication information in the subscriber terminal so as to determine based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

deciding means for deciding in the subscriber terminal on a communication connection changeover of the subscriber terminal by using the processing result.

14. (Previously Presented) The system according to claim 13, wherein said communication connection is conducted over a wireless communication network that is a WLAN, based on an IEEE 802.11 standard.

15. (Previously Presented) The system according to claim 14, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

16. (Previously Presented) The system according to claim 13, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

17. (Previously Presented) The system according to claim 13, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one access node.

18. (Previously Presented) The system according to claim 13, wherein said communication information further comprises a frequency band coverage indicator

related to frequency bands of neighboring access nodes of the at least one access node in the wireless communication network.

19. (Previously Presented) The system according to claim 13, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at a respective frequency band.

20. (Previously Presented) The system according to claim 13, further comprising second detecting means for detecting a signal strength indicator on a predetermined frequency band; wherein said processing means for processing are adapted to compare the detected signal strength indicator with a predefined threshold value, the result of the comparison indicating an estimation of the connection capability of an access node on another frequency band, and said deciding means for deciding on a communication connection changeover are configured to use the result of said comparison.

21. (Previously Presented) The system according to claim 13, wherein the deciding means for deciding on a communication connection changeover is located in the subscriber terminal.

22. (Previously Presented) The system according to claim 13, wherein the deciding means for deciding on a communication connection changeover are configured

to decide to change the communication connection from the present frequency band to another frequency band which is common to the subscriber terminal and an access node associated with the subscriber terminal.

23. (Previously Presented) The system according to claim 13, wherein the deciding means for deciding on a communication connection changeover are configured to decide to change the communication connection from the current access node to a specific frequency band of a neighboring access node which is common to the subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

24. (Previously Presented) The system according to claim 13, wherein the processing means for processing the transmitted communication information are configured to process communication information transmitted from two or more access nodes in a wireless communication network.

25. (Currently Amended) An access node for a wireless communication network, comprising:

detecting device configured to detect and transmit communication information to a subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, wherein said detecting device is further configured to

incorporate the communication information in a signaling using a transmission of specific frames to said subscriber terminal.

26. (Previously Presented) The access node according to claim 25, wherein said wireless communication network is a WLAN, based on an IEEE 802.11 standard.

27. (Previously Presented) The access node according to claim 26, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

28. (Previously Presented) The access node according to claim 25, wherein said communication information further comprises a multiple band indicator related to an access node.

29. (Previously Presented) The access node according to claim 25, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of an access node.

30. (Previously Presented) The access node according to claim 25, wherein said communication information further comprises a frequency band coverage indicator

related to frequency bands of neighboring access nodes of the access node in the wireless communication network.

31. (Previously Presented) The access node according to claim 25, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at the respective frequency band.

32. (Currently Amended) A subscriber terminal for communicating in a wireless communication network, comprising

a receiving device configured to receive communication information transmitted from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, and being transmitted from said at least one access node to said subscriber terminal by signaling by transmitting specific frames;

a processing device configured to process the transmitted communication information so as to determine based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

a decision device configured to decide on a communication connection changeover of the subscriber terminal by using a processing result.

33. (Previously Presented) The subscriber terminal according to claim 32, wherein said wireless communication network is a WLAN, based on an IEEE 802.11 standard.

34. (Previously Presented) The subscriber terminal according to claim 33, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

35. (Previously Presented) The subscriber terminal according to claim 32, wherein said receiving device is further configured to extract the communication information from a beacon packet broadcasted from the access node.

36. (Previously Presented) The subscriber terminal according to claim 32, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

37. (Previously Presented) The subscriber terminal according to claim 32, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one transmitting access node.

38. (Previously Presented) The subscriber terminal according to claim 32, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the transmitting access node in the wireless communication network.

39. (Previously Presented) The subscriber terminal according to claim 32, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at the respective frequency band.

40. (Previously Presented) The subscriber terminal according to claim 32, further comprising a detecting device configured to detecting a signal strength indicator on a predetermined frequency band; wherein said processing device is further configured to compare the detected signal strength indicator with a predefined threshold value, the result of the comparison indicating an estimation of the connection capability of an access node on another frequency band, and said decision device are configured to use the result of said comparison.

41. (Previously Presented) The subscriber terminal according to claim 32, wherein the decision device is further configured to decide to change the communication

connection from the present frequency band to another frequency band which is common to the subscriber terminal and the access node associated with the subscriber terminal.

42. (Previously Presented) The subscriber terminal according to claim 32, wherein the decision device is further configured to decide to change the communication connection from a current access node to a specific frequency band of a neighboring access node which is common to the subscriber terminal and a neighboring access node to be associated with the subscriber terminal.

43. (Previously Presented) The subscriber terminal according to claim 32, wherein the processing device is further configured to process communication information transmitted from two or more access nodes in the wireless communication network.

44. (Currently Amended) A computer program embodied on a computer readable medium, that when executed by a processor, is configured to control a method comprising:

detecting and transmitting communication information to a subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, and

incorporating the communication information in a signaling using a transmission of specific frames to said subscriber terminal.

45. (Currently Amended) A computer program embodied on a computer readable medium, that when executed by a processor, is configured to control a method comprising:

receiving communication information transmitted from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, and being transmitted from at least one access node to a subscriber terminal by signaling by transmitting specific frames;

processing the transmitted communication information to determine in the subscriber terminal, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

deciding in the subscriber terminal on a communication connection changeover of the subscriber terminal by using a result of the processing.

46. (Cancelled)

47. (Cancelled)

48. (Currently Amended) A method usable in an access node entity for a decision procedure on performing a communication connection changeover of a subscriber terminal, comprising:

detecting communication information from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate;

transmitting said communication information from said at least one access node to a subscriber terminal by signaling by transmitting specific frames.

49. (Currently Amended) A method usable in a subscriber terminal entity for a changeover decision procedure, comprising:

receiving communication information from at least one access node in a wireless communication network, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, by signaling by transmitting specific frames;

processing the transmitted communication information and determining based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

using the processing result for a decision on a communication connection changeover of a subscriber terminal.

50. (Currently Amended) The method according to claim 1, wherein the signaling comprises transmission of one or more specific frames.

51. (Previously Presented) The method according to claim 1, wherein the signaling comprises a Probe Request/Probe Response.

52. (Previously Presented) The method according to claim 4, wherein the multiple band indicator indicates at least one frequency band.

53. (Currently Amended) The system according to claim 13, wherein the signaling comprises a transmission of one or more specific frames.

54. (Previously Presented) The system according to claim 13, wherein the signaling comprises a Probe Request/Probe Response.

55. (Previously Presented) The system according to claim 16, wherein the multiple band indicator indicates at least one frequency band.

56. (Currently Amended) The access node according to claim 25, wherein the signaling comprises a transmission of one or more specific frames.

57. (Previously Presented) The access node according to claim 25, wherein the signaling comprises a Probe Request/Probe Response.

58. (Previously Presented) The access node according to claim 28, wherein the multiple band indicator indicates at least one frequency band.

59. (Currently Amended) The subscriber terminal according to claim 32, wherein the signaling comprises a transmission of one or more specific frames.

60. (Previously Presented) The subscriber terminal according to claim 32, wherein the signaling comprises a Probe Request/Probe Response.

61. (Previously Presented) The subscriber terminal according to claim 36, wherein the multiple band indicator indicates at least one frequency band.

62. (Cancelled)

63. (Cancelled)

64. (New) Method of deciding on a communication connection changeover of a subscriber terminal, said method comprising

detecting communication information from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate;

transmitting said communication information from said at least one access node to a subscriber terminal by signaling;

processing in the subscriber terminal the transmitted communication information and determining, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information, said processing further comprising detecting a signal strength indicator on a predetermined frequency band, and comparing the detected signal strength indicator with a predefined threshold value, wherein the result of the comparison indicates an estimation of the connection capability of an access node on another frequency band; and

using the processing result for a decision in the subscriber terminal on a communication connection changeover of the subscriber terminal.

65. (New) Method of deciding on a communication connection changeover of a subscriber terminal, said method comprising

detecting communication information from at least one access node, said communication information comprising frequency band information indicating at least

one frequency band where said at least one access node is capable to communicate and a frequency band coverage indicator related to continuation or discontinuation of availability of frequency bands in neighboring access nodes of the transmitting access node in the wireless communication network;

transmitting said communication information from said at least one access node to a subscriber terminal by signaling;

processing in the subscriber terminal the transmitted communication information and determining, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

using the processing result for a decision in the subscriber terminal on a communication connection changeover of the subscriber terminal.